

CLAIM AMENDMENTS

1. (Currently Amended) A method of coating a tubular implantable medical device, comprising rotating an applicator in a first direction so as to form ~~forming~~ a layer of a coating composition ~~that comprises a polymer and a solvent~~, on a surface of ~~an~~ the applicator, and transferring at least some of the layer of the coating composition onto a tubular implantable medical device ~~, wherein the tubular implantable medical device is supported on a mandrel rotating in a second direction, wherein the second direction is opposite to the first direction or refers to rotation about an axis that is not parallel to a rotation axis of the applicator.~~
2. (Original) The method of Claim 1, wherein the layer on the surface of the applicator has a thickness of about 2.5 microns to about 1000 microns.
3. (Original) The method of Claim 1, wherein the layer on the surface of the applicator has a thickness of about 25 microns to about 100 microns.
4. (Cancelled)
5. (Original) The method of Claim 1, wherein the layer of the coating composition is transferred to an outer surface of the device.
6. (Original) The method of Claim 1, wherein the viscosity of the coating composition is about 10 centipoises at ambient temperature and pressure to about 1000 centipoises at ambient temperature and pressure.
7. (Original) The method of Claim 1, wherein the device is a stent.

8. (Previously Presented) The method of Claim 1, wherein the coating composition further comprises a therapeutic substance.

9. (Currently Amended) A method of coating a tubular implantable medical device, the medical device having a bore, comprising:

placing an applicator having an applicator surface containing at least a polymer dissolved in a solvent into the bore; and

applying the polymer dissolved in a solvent to the bore.

~~forming a layer of a composition that comprises a polymer and a solvent on a surface of an applicator substrate; and rotating a tubular implantable medical device that is supported on a mandrel along a longitudinal central axis of the device while a surface of the device is in close proximity to or in contact with a surface of the applicator substrate.~~

10. (Cancelled).

11. (Cancelled).

12. (Currently Amended) The method of Claim 1 ~~Claim 9~~, wherein the rotational speed of the tubular device is between 1 rotation per minute to 250 rotations per minute.

13. (Currently Amended) The method of Claim 1 ~~Claim 9~~, wherein the rotating the applicator step ~~forming the layer of composition on the applicator substrate~~ includes depositing a mass of the composition on the applicator substrate followed by leveling the composition so that the layer has a substantially uniform thickness.

14. (Original) The method of Claim 13, wherein leveling the composition comprises directing a gas to the coating composition, the gas having sufficient air flow to reduce the profile of the composition.

15. (Currently Amended) The method of Claim 13, wherein leveling the composition comprises positioning a barrier at a distance above the surface of the applicator ~~substrate~~ and at a position before the composition reaches the tubular device such that the movement of the ~~surface applicator-substrate~~ past the barrier causes the composition to level to the substantially uniform thickness.

16. (Currently Amended) The method of ~~Claim 9~~ Claim 18, wherein the surface of the applicator ~~substrate~~ is substantially flat.

17. (Currently Amended) The method of ~~Claim 9~~ Claim 18, wherein the surface of the applicator ~~substrate~~ is cylindrical in shape.

18. (Currently Amended) A method of coating a tubular implantable medical device, comprising:

rotating a member so as to form a layer of a coating composition over a surface of an applicator, and transferring at least some of the layer of the coating composition onto a tubular implantable medical device while the member rotates

depositing a layer of a composition on a surface of an applicator;

~~positioning a tubular implantable medical device that is supported on a mandrel in close proximity to or in contact with the surface of the applicator, and rotating the applicator to deposit the composition on the tubular device.~~

19. (Cancelled)

20. (Currently Amended) The method of Claim 18, wherein the composition is applied to the outer surface of the device ~~or the inner surface of the device but not both at the same time.~~

21. (Currently Amended) The method of Claim 18, wherein the rotational speed of the applicator member is between 0.1 rotations per minute to 200 rotations per minute.

22. (Original) The method of Claim 18, additionally comprising leveling the composition on the surface of the applicator so that the layer has a substantially uniform thickness.

23. (Currently Amended) The method of Claim 18, wherein the applicator member has a radius of curvature about equal to a radius of curvature of the tubular device.

24. (Currently Amended) The method of Claim 18, further comprising rotating the device along about a central longitudinal axis of the device.

Claims 25-40. (Canceled).

41. (Currently Amended) A method of coating a tubular implantable medical device having an outer surface, whereby a surface portion forms a portion of the outer surface and the surface portion extends along the longitudinal axis of the medical device, the method comprising:

submerging ~~the a portion of~~ a tubular implantable medical device into a coating composition including placing only the surface portion in contact with the coating composition; along a longitudinal length of the device; and

rotating the submerged device along about the ~~[[a]] longitudinal central axis of the device while the device is partially submerged in the coating composition.~~

42. (Currently Amended) The method of Claim 18 ~~claim 9~~, wherein the surface of the applicator substrate includes vertical grooves, horizontal grooves, grooves with a zigzag pattern, grooves and/or a ~~in a discontinuous pattern or any combination thereof.~~

43. (Canceled).

44. (Canceled).

45. (New) The method of Claim 1, wherein the tubular implantable medical device is supported on a mandrel.

46. (New) The method of Claim 1, wherein the applicator rotates about a first axis and the tubular implantable medical device rotates about a second axis that is perpendicular to the first axis.

47. (New) The method of Claim 1, wherein the applicator rotates in a clockwise direction and the tubular implantable medical device rotates in a counter-clockwise direction.

48. (New) The method of Claim 1, wherein the applicator includes conveyor rollers.

49. (New) The method of Claim 1, wherein the applicator includes a roller.

50. (New) The method of Claim 49, wherein the roller is partially submerged in a reservoir comprising a polymer and a solvent.
51. (New) The method of Claim 1, wherein the roller is partially submerged in a reservoir comprising a polymer and a solvent.
52. (New) The method of Claim 1, wherein the applicator rotates at about the same rate as medical device.
53. (New) The method of Claim 1, wherein the applicator rotates and after the applicator rotates, the medical device rotates.
54. (New) the method of Claim 9, further including the step of rolling the applicator around an inner circumference of the bore to thereby apply the polymer dissolved in a solvent to the bore.
55. (New) The method of Claim 18, wherein the member rotates at an angular rate, further including the step of rotating the medical device in a direction opposite to the rotation direction of the member but at the same angular rate.
56. (New) The method of Claim 18, wherein the rotating a member so as to form a layer of a coating composition over a surface of an applicator includes rotating a member so as to form a layer of a coating composition over a surface of the member.
57. (New) the method of Claim 18, wherein the applicator comprises a conveyor having a plurality of rotating members.

58. (New) The method of Claim 41, wherein the placing step further includes suspending the device over the coating composition such that only the surface portion is in contact with the coating composition.